

09937946

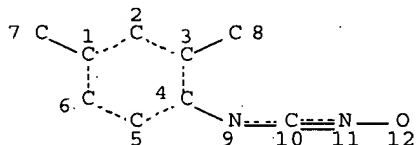
=> dis his nofile

(FILE 'HOME' ENTERED AT 15:51:29 ON 16 AUG 2007)

FILE 'REGISTRY' ENTERED AT 15:51:38 ON 16 AUG 2007

L1 STR
L*** DEL2241598 S L
L2 5 SEA SSS SAM L1
L3 115 SEA SSS FUL L1

=> d l3 que stat;fil medl,biosis,embase,caplus;s l3
L1 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
L3 115 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 187 ITERATIONS
SEARCH TIME: 00.00.01

115 ANSWERS

FILE 'MEDLINE' ENTERED AT 15:53:18 ON 16 AUG 2007

FILE 'BIOSIS' ENTERED AT 15:53:18 ON 16 AUG 2007
Copyright (c) 2007 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 15:53:18 ON 16 AUG 2007
Copyright (c) 2007 Elsevier B.V. All rights reserved.

FILE 'CAPLUS' ENTERED AT 15:53:18 ON 16 AUG 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

L4 0 FILE MEDLINE
L5 23 FILE BIOSIS
L6 0 FILE EMBASE
L7 41 FILE CAPLUS

TOTAL FOR ALL FILES
L8 64 L3

=> s cerebr? vascul? disease or stroke or cerebrovasospasm or blood(5a)subarachnoid
or head injur?

09937946

L9 115250 FILE MEDLINE
L10 92093 FILE BIOSIS
L11 125191 FILE EMBASE
L12 37304 FILE CAPLUS

TOTAL FOR ALL FILES

L13 369838 CEREBR? VASCUL? DISEASE OR STROKE OR CEREBROVASCOSPASM OR BLOOD(5
A) SUBARACHNOID OR HEAD INJUR?

=> s 18 and 113

L14 0 FILE MEDLINE
L15 1 FILE BIOSIS
L16 0 FILE EMBASE
L17 3 FILE CAPLUS

TOTAL FOR ALL FILES

L18 4 L8 AND L13

=> dup rem 118

PROCESSING COMPLETED FOR L18

L19 3 DUP REM L18 (1 DUPLICATE REMOVED)

=> d 1-3 ibib abs hitstr

L19 ANSWER 1 OF 3 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
DUPLICATE 1

ACCESSION NUMBER: 2007:36889 BIOSIS Full-text

DOCUMENT NUMBER: PREV200700029005

TITLE: Protective effect of the 20-HETE inhibitor HET0016 on brain
damage after temporary focal ischemia.

AUTHOR(S): Poloyac, Samuel M. [Reprint Author]; Zhang, Yuqing; Bies,
Robert R.; Kochanek, Patrick M.; Graham, Steven H.

CORPORATE SOURCE: Univ Pittsburgh, Sch Pharm, Dept Pharmaceut Sci, 808A Salk
Hall, Pittsburgh, PA 15261 USA
poloyac@pitt.edu

SOURCE: Journal of Cerebral Blood Flow & Metabolism, (DEC 2006)
Vol. 26, No. 12, pp. 1551-1561..
CODEN: JCBMDN. ISSN: 0271-678X.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 27 Dec 2006

Last Updated on STN: 27 Dec 2006

AB Cytochrome P450 metabolism of arachidonic acid produces the potent
vasoconstrictive metabolite, 20-hydroxyeicosatetraenoic acid (20-HETE). Recent
studies have implicated 20-HETE as a vasoconstrictive mediator in hemorrhagic
stroke. The purpose of this study was to determine the effect of the 20-HETE
inhibitor, HET0016, on lesion volume and cerebral blood flow (CBF) after
temporary middle cerebral artery occlusion (MCAO) in rats. Plasma
pharmacokinetics and tissue concentrations of HET0016 were determined after a
10 mg/kg intraperitoneal dose. Separate rats were treated with HET0016 or
vehicle before 90 mins of MCAO. Lesion volume was assessed by 2,3,5-
triphenyl-tetrazolium-chloride and cerebral flow was determined using laser
Doppler flow. The effect of MCAO on in vitro microsomal formation of mono-
oxygenated arachidonic acid metabolites was also determined. Results show
that HET0016 has a short biologic half-life, distributes into the brain, and
is associated with a 79.6% reduction in 20-HETE concentration in the cortex.
Lesion volume was greatly reduced in HET0016-treated (9.1% \pm 4.9%) versus
vehicle-treated (57.4% \pm 9.8%; n=6; P < 0.001) rats. An attenuation of the
observed decrease in CBF was observed in HET0016-treated (180 mins 89.2% \pm -
6.2%; 240 mins 88.1% \pm 5.7% of baseline flow) versus vehicle control (180

09937946

mins 57.6%+/- 09.0%; 240 mins 53.8%+/- 20.0% of baseline flow; n=6; P < 0.05). Brain cortical microsomal formation rate of 20-HETE was also reduced at 24 dh in the ipsilateral hemisphere after MCAO. These data support a significant role for 20-HETE in the pathogenesis of ischemic stroke.

L19 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:353270 CAPLUS Full-text

DOCUMENT NUMBER: 136:363861

TITLE: Use of 20-HETE synthesizing enzyme inhibitors as therapy for cerebral vascular diseases.

INVENTOR(S): Roman, Richard J.; Harder, David R.; Miyata, Noriyuki; Sato, Masakazu; Kameo, Kazuya; Okuyama, Shigeru

PATENT ASSIGNEE(S): MCW Research Foundation, Inc., USA; Taisho Pharmaceutical Co., Ltd.

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002036108	A2	20020510	WO 2001-US27605	20010906
WO 2002036108	A3	20021017		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2427557	A1	20020510	CA 2001-2427557	20010906
AU 200188798	A	20020515	AU 2001-88798	20010906
EP 1330240	A2	20030730	EP 2001-968558	20010906
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004512361	T	20040422	JP 2002-538920	20010906
US 2005153871	A1	20050714	US 2001-937946	20010906
CN 1655775	A	20050817	CN 2001-818397	20010906
PRIORITY APPLN. INFO.:			US 2000-245638P	P 20001103
			WO 2001-US27605	W 20010906

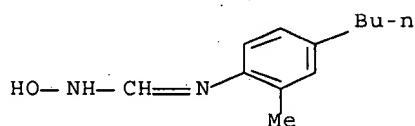
AB A method for treating cerebral vascular diseases in a human or non-human animal is disclosed. The method involves inhibiting 20-HETE synthesizing enzyme activity sufficiently to increase or prevent a decrease in cerebral blood flow in the human or non-human animal.

IT 339068-25-6, HET0016

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of 20-HETE synthesizing enzyme inhibitors as therapy for cerebral vascular diseases by increasing cerebral blood flow)

RN 339068-25-6 CAPLUS

CN Methanimidamide, N-(4-butyl-2-methylphenyl)-N'-hydroxy- (CA INDEX NAME)



L19 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:283486 CAPLUS Full-text

DOCUMENT NUMBER: 137:31503

TITLE: 20-HETE contributes to the acute fall in cerebral blood flow after subarachnoid hemorrhage in the rat

AUTHOR(S): Kehl, Franz; Cambj-Sapunar, Liana; Maier, Kristopher G.; Miyata, Noriyuki; Kametani, Shunishi; Okamoto, Hirotsugu; Hudetz, Anthony G.; Schulte, Marie L.; Zagorac, Drazen; Harder, David R.; Roman, Richard J.

CORPORATE SOURCE: Department of Physiology, Medical College of Wisconsin, Milwaukee, WI, 53226, USA

SOURCE: American Journal of Physiology (2002), 282(4, Pt. 2), H1556-H1565

CODEN: AJPHAP; ISSN: 0002-9513

PUBLISHER: American Physiological Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB This study examined the effects of blocking the formation of 20-hydroxyeicosatetraenoic acid (20-HETE) on the acute fall in cerebral blood flow after subarachnoid hemorrhage (SAH) in the rat. In vehicle-treated rats, regional cerebral blood flow (rCBF) measured with laser-Doppler flowmetry fell by 30% 10 min after the injection of 0.3 mL of arterial blood into the cisterna magna, and it remained at this level for 2 h. Pretreatment with inhibitors of the formation of 20-HETE, 17-octadecynoic acid (17-ODYA; 1.5 nmol intrathecally) and N-hydroxy-N'-(4-butyl-2-methylphenyl)formamidine (HET0016; 10 mg/kg iv), reduced the initial fall in rCBF by 40%, and rCBF fully recovered 1 h after induction of SAH. The concentration of 20-HETE in the cerebrospinal fluid rose from 12 ± 2 to 199 ± 17 ng/mL after SAH in vehicle-treated rats. 20-HETE levels averaged only 15 ± 11 and 39 ± 13 ng/mL in rats pretreated with 17-ODYA or HET0016, resp. HET0016 selectively inhibited the formation of 20-HETE in rat renal microsomes with an IC_{50} of <15 nM and human recombinant CYP4A11, CYP4F2, and CYP4F3 enzymes with an IC_{50} of 42, 125, and 100 nM, resp. These results indicate that 20-HETE contributes to the acute fall in rCBF after SAH in rats.

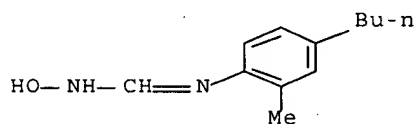
IT 339068-25-6, HET0016

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(20-HETE role in acute fall in cerebral blood flow after subarachnoid hemorrhage in the rat)

RN 339068-25-6 CAPLUS

CN Methanimidamide, N-(4-butyl-2-methylphenyl)-N'-hydroxy- (CA INDEX NAME)



09937946

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> fil reg

FILE 'REGISTRY' ENTERED AT 15:55:17 ON 16 AUG 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 15 AUG 2007 HIGHEST RN 944769-12-4
DICTIONARY FILE UPDATES: 15 AUG 2007 HIGHEST RN 944769-12-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> e "n-hydroxy-n'-(4-butyl-2-methylphenyl)-formamidine"/cn
E1 1 N-HYDROXY-N'-(2-METHYLAMINOETHYL)-2,3-BUTANEDIIMINE/CN
E2 1 N-HYDROXY-N'-(3-(METHYLTHIO)PROPYL)-N-((TRANS-2-PHENYLCYCLOP
ROPYL)METHYL)UREA/CN
E3 0 --> N-HYDROXY-N'-(4-BUTYL-2-METHYLPHENYL)-FORMAMIDINE/CN
E4 1 N-HYDROXY-N'-(4-METHOXYPHENYL)BENZAMIDINE/CN
E5 1 N-HYDROXY-N'-(4-METHYLPHENYL)-4-NITROBENZENECARBOXIMIDAMIDE/
CN
E6 1 N-HYDROXY-N'-(4-METHYLPHENYL)GUANIDINE/CN
E7 1 N-HYDROXY-N'-(M-CHLOROBENZOYLAMINO)-2,5-CYCLOHEXADIENEDIIMIN
E/CN
E8 1 N-HYDROXY-N'-(M-METHOXYPHENYL)UREA/CN
E9 1 N-HYDROXY-N'-(M-METHYLPHENYL)UREA/CN
E10 1 N-HYDROXY-N'-(M-NITROPHENYL)UREA/CN
E11 1 N-HYDROXY-N'-(O-HYDROXYBENZOYLAMINO)-2,5-CYCLOHEXADIENEDIIMI
NE/CN
E12 1 N-HYDROXY-N'-(O-METHOXYPHENYL)UREA/CN

=> e het0016/cn 5
E1 1 HET ACID-NEOPENTYL GLYCOL POLYMER, SRU/CN
E2 1 HET ANHYDRIDE/CN
E3 0 --> HET0016/CN
E4 1 HETA-AMOXICILLIN/CN
E5 1 HETACAT/CN

=> fil medl,biosis,embase,caplus,wpids

FILE 'MEDLINE' ENTERED AT 15:56:21 ON 16 AUG 2007

09937946

FILE 'BIOSIS' ENTERED AT 15:56:21 ON 16 AUG 2007
Copyright (c) 2007 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 15:56:21 ON 16 AUG 2007
Copyright (c) 2007 Elsevier B.V. All rights reserved.

FILE 'CAPLUS' ENTERED AT 15:56:21 ON 16 AUG 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIDS' ENTERED AT 15:56:21 ON 16 AUG 2007
COPYRIGHT (C) 2007 THE THOMSON CORPORATION

=> s "n-hydroxy-n'-(4-butyl-2-methylphenyl)-formamidine" or
hydroxy(l)butyl(l)methylphenyl(l)formamidine? or het0016

L20	31	FILE MEDLINE
L21	45	FILE BIOSIS
L22	31	FILE EMBASE
L23	28	FILE CAPLUS
L24	9	FILE WPIDS

TOTAL FOR ALL FILES

L25	144	"N-HYDROXY-N'-(4-BUTYL-2-METHYLPHENYL)-FORMAMIDINE" OR HYDROXY(L)) BUTYL(L) METHYLPHENYL(L) FORMAMIDINE? OR HET0016
-----	-----	---

=> s l25 and l13

L26	3	FILE MEDLINE
L27	3	FILE BIOSIS
L28	3	FILE EMBASE
L29	3	FILE CAPLUS
L30	1	FILE WPIDS

TOTAL FOR ALL FILES

L31	13	L25 AND L13
-----	----	-------------

=> fil medl,biosis,embase,caplus

FILE 'MEDLINE' ENTERED AT 15:57:46 ON 16 AUG 2007

FILE 'BIOSIS' ENTERED AT 15:57:46 ON 16 AUG 2007
Copyright (c) 2007 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 15:57:46 ON 16 AUG 2007
Copyright (c) 2007 Elsevier B.V. All rights reserved.

FILE 'CAPLUS' ENTERED AT 15:57:46 ON 16 AUG 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l31 not l18

L36	3	FILE MEDLINE
L37	2	FILE BIOSIS
L38	3	FILE EMBASE
L39	0	FILE CAPLUS

TOTAL FOR ALL FILES

L40	8	L31 NOT L18
-----	---	-------------

09937946

=> dup rem l40

PROCESSING COMPLETED FOR L40

L41 4 DUP REM L40 (4 DUPLICATES REMOVED)

=> d 1-4 ibib abs

L41 ANSWER 1 OF 4 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 2006684608 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 16570075
TITLE: Protective effect of the 20-HETE inhibitor HET0016
on brain damage after temporary focal ischemia.
AUTHOR: Poloyac Samuel M; Zhang Yuqing; Bies Robert R; Kochanek
Patrick M; Graham Steven H
CORPORATE SOURCE: Department of Pharmaceutical Sciences, School of Pharmacy,
University of Pittsburgh, Pittsburgh, Pennsylvania 15261,
USA.. poloyac@pitt.edu
CONTRACT NUMBER: 1R01NS052315-01 (NINDS)
EB001975-06 (NIBIB)
SOURCE: Journal of cerebral blood flow and metabolism : official
journal of the International Society of Cerebral Blood Flow
and Metabolism, (2006 Dec) Vol. 26, No. 12, pp. 1551-61.
Electronic Publication: 2006-03-29.
Journal code: 8112566. ISSN: 0271-678X.
PUB. COUNTRY: United States
DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, N.I.H., EXTRAMURAL)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200612
ENTRY DATE: Entered STN: 25 Nov 2006
Last Updated on STN: 29 Dec 2006
Entered Medline: 28 Dec 2006

AB Cytochrome P450 metabolism of arachidonic acid produces the potent
vasoconstrictive metabolite, 20-hydroxyeicosatetraenoic acid (20-HETE). Recent
studies have implicated 20-HETE as a vasoconstrictive mediator in hemorrhagic
stroke. The purpose of this study was to determine the effect of the 20-HETE
inhibitor, HET0016, on lesion volume and cerebral blood flow (CBF) after
temporary middle cerebral artery occlusion (MCAO) in rats. Plasma
pharmacokinetics and tissue concentrations of HET0016 were determined after a
10 mg/kg intraperitoneal dose. Separate rats were treated with HET0016 or
vehicle before 90 mins of MCAO. Lesion volume was assessed by 2,3,5-
triphenyl-tetrazolium-chloride and cerebral flow was determined using laser
Doppler flow. The effect of MCAO on in vitro microsomal formation of mono-
oxygenated arachidonic acid metabolites was also determined. Results show
that HET0016 has a short biologic half-life, distributes into the brain, and
is associated with a 79.6% reduction in 20-HETE concentration in the cortex.
Lesion volume was greatly reduced in HET0016-treated (9.1% \pm 4.9%) versus
vehicle-treated (57.4% \pm 9.8%; n=6; P<0.001) rats. An attenuation of the
observed decrease in CBF was observed in HET0016-treated (180 mins 89.2% \pm 6.2%;
240 mins 88.1% \pm 5.7% of baseline flow) versus vehicle control (180 mins
57.6% \pm 19.0%; 240 mins 53.8% \pm 20.0% of baseline flow; n=6; P<0.05). Brain
cortical microsomal formation rate of 20-HETE was also reduced at 24 h in the
ipsilateral hemisphere after MCAO. These data support a significant role for
20-HETE in the pathogenesis of ischemic stroke.

L41 ANSWER 2 OF 4 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2003209741 MEDLINE Full-text

09937946

DOCUMENT NUMBER: PubMed ID: 12677022
TITLE: Contribution of 5-hydroxytryptamine_{1B} receptors and 20-hydroxyeicosatetraenoic acid to fall in cerebral blood flow after subarachnoid hemorrhage.
AUTHOR: Cambj-Sapunar Liana; Yu Ming; Harder David R; Roman Richard J
CORPORATE SOURCE: Department of Physiology, Medical College of Wisconsin, 8701 Watertown Plank Rd, Milwaukee, WI 53226, USA.
SOURCE: Stroke; a journal of cerebral circulation, (2003 May) Vol. 34, No. 5, pp. 1269-75. Electronic Publication: 2003-04-03.
Journal code: 0235266. E-ISSN: 1524-4628.
PUB. COUNTRY: United States
DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200306
ENTRY DATE: Entered STN: 6 May 2003
Last Updated on STN: 1 Jul 2003
Entered Medline: 30 Jun 2003

AB BACKGROUND AND PURPOSE: This study examined the interaction between 5-hydroxytryptamine_{1B} (5-HT_{1B}) receptors and 20-hydroxyeicosatetraenoic acid (20-HETE) in contributing to the acute fall in regional cerebral blood flow (rCBF) after subarachnoid hemorrhage (SAH) in rats. METHODS: The effects of intracisternal injection of 0.3 mL of arterial blood, artificial cerebrospinal fluid, and 5-HT on rCBF and the levels of 20-HETE and 5-HT in cerebrospinal fluid were measured in rats pretreated with vehicle, a 5-HT_{1B} receptor antagonist (isamoltane hemifumarate), or an inhibitor of the synthesis of 20-HETE (HET0016). The effects of HET0016 and isamoltane on the vasoconstrictor response and changes in [Ca²⁺]_i to 5-HT were also studied in middle cerebral arteries and vascular smooth muscle cells isolated from these vessels. RESULTS: 20-HETE and 5-HT levels in cerebrospinal fluid rose from 172±10 to 629±44 ng/mL and from 6±4 to 1163±200 nmol/mL, respectively, after SAH. rCBF fell by 30% 10 minutes after SAH, and it remained at this level for the next 2 hours. Blockade of 5-HT_{1B} receptors prevented the sustained fall in rCBF seen after SAH. Intracisternal injection of 5-HT mimicked SAH by increasing 20-HETE levels in cerebrospinal fluid to 475±94 ng/mL and reducing rCBF by 30%. Blockade of the synthesis of 20-HETE with HET0016 prevented the fall in rCBF produced by 5-HT. Isamoltane and HET0016 reduced the vasoconstrictor response of isolated MCA to 5-HT by >60% and diminished the rise in [Ca²⁺]_i produced by 5-HT in vascular smooth muscle cells isolated from these arteries. CONCLUSIONS: These results suggest that the release of 5-HT after SAH activates 5-HT_{1B} receptors and the synthesis of 20-HETE and that 20-HETE contributes to the acute fall in rCBF by potentiating the vasoconstrictor response of cerebral vessels to 5-HT.

L41 ANSWER 3 OF 4 MEDLINE on STN DUPLICATE 3
ACCESSION NUMBER: 2002161743 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 11893593
TITLE: 20-HETE contributes to the acute fall in cerebral blood flow after subarachnoid hemorrhage in the rat.
AUTHOR: Kehl Franz; Cambj-Sapunar Liana; Maier Kristopher G; Miyata Noriyuki; Kametani Shunishi; Okamoto Hirotsugu; Hudetz Anthony G; Schulte Marie L; Zagorac Drazen; Harder David R; Roman Richard J
CORPORATE SOURCE: Department of Physiology, Medical College of Wisconsin, Milwaukee, Wisconsin 53226, USA.

09937946

CONTRACT NUMBER: GM-56398 (NIGMS)
HL-10407-01 (NHLBI)
HL-29587 (NHLBI)
HL-29662 (NHLBI)
HL-59996 (NHLBI)
SOURCE: American journal of physiology. Heart and circulatory
physiology, (2002 Apr) Vol. 282, No. 4, pp. H1556-65.
Journal code: 100901228. ISSN: 0363-6135.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
(RESEARCH SUPPORT, U.S. GOV'T, NON-P.H.S.)
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200205
ENTRY DATE: Entered STN: 15 Mar 2002
Last Updated on STN: 10 May 2002
Entered Medline: 9 May 2002

AB This study examined the effects of blocking the formation of 20-hydroxyeicosatetraenoic acid (20-HETE) on the acute fall in cerebral blood flow after subarachnoid hemorrhage (SAH) in the rat. In vehicle-treated rats, regional cerebral blood flow (rCBF) measured with laser-Doppler flowmetry fell by 30% 10 min after the injection of 0.3 ml of arterial blood into the cisterna magna, and it remained at this level for 2 h. Pretreatment with inhibitors of the formation of 20-HETE, 17-octadecynoic acid (17-ODYA; 1.5 nmol intrathecally) and N-hydroxy-N'-(4-butyl-2-methylphenyl)formamidine (HET0016; 10 mg/kg iv), reduced the initial fall in rCBF by 40%, and rCBF fully recovered 1 h after induction of SAH. The concentration of 20-HETE in the cerebrospinal fluid rose from 12 +/- 2 to 199 +/- 17 ng/ml after SAH in vehicle-treated rats. 20-HETE levels averaged only 15 +/- 11 and 39 +/- 13 ng/ml in rats pretreated with 17-ODYA or HET0016, respectively. HET0016 selectively inhibited the formation of 20-HETE in rat renal microsomes with an IC(50) of <15 nM and human recombinant CYP4A11, CYP4F2, and CYP4F3 enzymes with an IC(50) of 42, 125, and 100 nM, respectively. These results indicate that 20-HETE contributes to the acute fall in rCBF after SAH in rats.

L41 ANSWER 4 OF 4 EMBASE. COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2002218815 EMBASE Full-text
TITLE: 20-HETE contributes to the acute fall in cerebral
blood flow after subarachnoid hemorrhage
in the rat.
AUTHOR: Kehl F.; Cambj-Sapunar L.; Maier K.G.; Miyata N.; Kametani
S.; Okamoto H.; Hudetz A.G.; Schulte M.L.; Zagorac D.;
Harder D.R.; Roman R.J.
CORPORATE SOURCE: R.J. Roman, Dept. of Physiology, Medical College of
Wisconsin, 8701 Watertown Plank Rd., Milwaukee, WI 53226,
United States. rroman@mcw.edu
SOURCE: American Journal of Physiology - Heart and Circulatory
Physiology, (2002) Vol. 282, No. 4 51-4, pp. H1556-H1565. .
Refs: 45
ISSN: 0363-6135 CODEN: AJPPDI
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 002 Physiology
008 Neurology and Neurosurgery
LANGUAGE: English

09937946

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 8 Jul 2002

Last Updated on STN: 8 Jul 2002

AB This study examined the effects of blocking the formation of 20-hydroxyeicosatetraenoic acid (20-HETE) on the acute fall in cerebral blood flow after subarachnoid hemorrhage (SAH) in the rat. In vehicle-treated rats, regional cerebral blood flow (rCBF) measured with laser-Doppler flowmetry fell by 30% 10 min after the injection of 0.3 ml of arterial blood into the cisterna magna, and it remained at this level for 2 h. Pretreatment with inhibitors of the formation of 20-HETE, 17-octadecynoic acid (17-ODYA; 1.5 nmol intrathecally) and N-hydroxy-N'-(4-butyl-2-methylphenyl)formamidine (HET0016; 10 mg/kg iv), reduced the initial fall in rCBF by 40%, and rCBF fully recovered 1 h after induction of SAH. The concentration of 20-HETE in the cerebrospinal fluid rose from 12 ± 2 to 199 ± 17 ng/ml after SAH in vehicle-treated rats. 20-HETE levels averaged only 15 ± 11 and 39 ± 13 ng/ml in rats pretreated with 17-ODYA or HET0016, respectively. HET0016 selectively inhibited the formation of 20-HETE in rat renal microsomes with an IC(50) of <15 nM and human recombinant CYP4A11, CYP4F2, and CYP4F3 enzymes with an IC(50) of 42, 125, and 100 nM, respectively. These results indicate that 20-HETE contributes to the acute fall in rCBF after SAH in rats.

=> s roman r?/au;s harder d?/au;s miyata n?/au;s sato m?/au;s kameo k?/au;s okuyama s?/au

L42 474 FILE MEDLINE
L43 752 FILE BIOSIS
L44 491 FILE EMBASE
L45 544 FILE CAPLUS

TOTAL FOR ALL FILES

L46 2261 ROMAN R?/AU

L47 334 FILE MEDLINE
L48 596 FILE BIOSIS
L49 323 FILE EMBASE
L50 262 FILE CAPLUS

TOTAL FOR ALL FILES

L51 1515 HARDER D?/AU

L52 286 FILE MEDLINE
L53 354 FILE BIOSIS
L54 312 FILE EMBASE
L55 848 FILE CAPLUS

TOTAL FOR ALL FILES

L56 1800 MIYATA N?/AU

L57 5522 FILE MEDLINE
L58 6740 FILE BIOSIS
L59 4543 FILE EMBASE
L60 18124 FILE CAPLUS

TOTAL FOR ALL FILES

09937946

L61 34929 SATO M?/AU

L62 28 FILE MEDLINE
L63 55 FILE BIOSIS
L64 28 FILE EMBASE
L65 131 FILE CAPLUS

TOTAL FOR ALL FILES

L66 242 KAMEO K?/AU

L67 390 FILE MEDLINE
L68 558 FILE BIOSIS
L69 345 FILE EMBASE
L70 649 FILE CAPLUS

TOTAL FOR ALL FILES

L71 1942 OKUYAMA S?/AU

=> s 146 and 151 and 156 and 161 and 166 and 171

L72 0 FILE MEDLINE
L73 0 FILE BIOSIS
L74 0 FILE EMBASE
L75 1 FILE CAPLUS

TOTAL FOR ALL FILES

L76 1 L46 AND L51 AND L56 AND L61 AND L66 AND L71

=> d ibib abs

L76 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:353270 CAPLUS Full-text

DOCUMENT NUMBER: 136:363861

TITLE: Use of 20-HETE synthesizing enzyme inhibitors as
therapy for cerebral vascular diseases

INVENTOR(S): Roman, Richard J.; Harder, David R.
; Miyata, Noriyuki; Sato, Masakazu
; Kameo, Kazuya; Okuyama, Shigeru

PATENT ASSIGNEE(S): MCW Research Foundation, Inc., USA; Taisho
Pharmaceutical Co., Ltd.

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002036108	A2	20020510	WO 2001-US27605	20010906
WO 2002036108	A3	20021017		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,			

09937946

BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
CA 2427557 A1 20020510 CA 2001-2427557 20010906
AU 200188798 A 20020515 AU 2001-88798 20010906
EP 1330240 A2 20030730 EP 2001-968558 20010906
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2004512361 T 20040422 JP 2002-538920 20010906
US 2005153871 A1 20050714 US 2001-937946 20010906
CN 1655775 A 20050817 CN 2001-818397 20010906
PRIORITY APPLN. INFO.: US 2000-245638P P 20001103
WO 2001-US27605 W 20010906
AB A method for treating cerebral vascular diseases in a human or non-human animal is disclosed. The method involves inhibiting 20-HETE synthesizing enzyme activity sufficiently to increase or prevent a decrease in cerebral blood flow in the human or non-human animal.

=> s (l46 or l51 or l56 or l61 or l66 or l71)
L77 6950 FILE MEDLINE
L78 8888 FILE BIOSIS
L79 5964 FILE EMBASE
L80 20447 FILE CAPLUS

TOTAL FOR ALL FILES

L81 42249 (L46 OR L51 OR L56 OR L61 OR L66 OR L71)

=> s (l3 or l25 or l13) and l81
L82 95 FILE MEDLINE
L83 108 FILE BIOSIS
L84 90 FILE EMBASE
L85 57 FILE CAPLUS

TOTAL FOR ALL FILES

L86 350 (L3 OR L25 OR L13) AND L81

=> s l86 not (l76 or l40 or l18)
L87 93 FILE MEDLINE
L88 106 FILE BIOSIS
L89 88 FILE EMBASE
L90 55 FILE CAPLUS

TOTAL FOR ALL FILES

L91 342 L86 NOT (L76 OR L40 OR L18)

=> dup rem l91
PROCESSING COMPLETED FOR L91
L92 186 DUP REM L91 (156 DUPLICATES REMOVED)

=> d 1 abs

L92 ANSWER 1 OF 186 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

AB Jeffs et. al identified a genetic locus on chromosome 5 that is linked to infarct size following MCAO in SHRSP rats. Contained within this QTL are the cytochrome P-450 4A omega-hydroxylase genes which catalyze the formation of the vasoconstrictor 20-HETE from arachidonic acid (AA). Our lab has previously shown a role for 20-HETE in the pathogenesis of both hemorrhagic and ischemic models of stroke. The purpose of this study was to measure

09937946

cerebral vascular 20-HETE formation and CYP4A expression in SHRSP rats compared to stroke-resistant WKY and SHR strains. 20-HETE formation was quantified using triple quadrupole liquid chromatography mass spectrometry (LC/MS/MS). CYP4A protein expression was analyzed by western blot. Results indicate 20-HETE formation is significantly elevated in SHRSP rats relative to WKY and SHR (WKY 0.2237 +/- 0.0309 pmol/min/mg protein, n=6; SHR 0.3027 +/- 0.0459, n=5; SHRSP 0.3854 +/- 0.0368, n=5). Western blot analysis indicates significant elevation of CYP4A protein expression in SHRSP rats compared to WKY rats. Upregulation of cerebral vascular CYP4A expression and 20-HETE formation may contribute to sensitivity to cerebral ischemia in SHRSP rats.

=> s (l3 or l25) and l13 and l81

L93 2 FILE MEDLINE
L94 2 FILE BIOSIS
L95 2 FILE EMBASE
L96 2 FILE CAPLUS

TOTAL FOR ALL FILES

L97 8 (L3 OR L25) AND L13 AND L81

=> s l97 not (l76 or l40 or l18)

L98 0 FILE MEDLINE
L99 0 FILE BIOSIS
L100 0 FILE EMBASE
L101 0 FILE CAPLUS

TOTAL FOR ALL FILES

L102 0 L97 NOT (L76 OR L40 OR L18)

=> dis his ful

(FILE 'HOME' ENTERED AT 15:51:29 ON 16 AUG 2007)

FILE 'REGISTRY' ENTERED AT 15:51:38 ON 16 AUG 2007

L1 STR
L*** DEL2241598 S L
L2 5 SEA SSS SAM L1
L3 115 SEA SSS FUL L1
D L3 QUE STAT

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 15:53:18 ON 16 AUG 2007

L4 0 SEA ABB=ON PLU=ON L3
L5 23 SEA ABB=ON PLU=ON L3
L6 0 SEA ABB=ON PLU=ON L3
L7 41 SEA ABB=ON PLU=ON L3

TOTAL FOR ALL FILES

L8 64 SEA ABB=ON PLU=ON L3
L9 115250 SEA ABB=ON PLU=ON CEREBR? VASCUL? DISEASE OR STROKE OR
CEREBROVASOSPASM OR BLOOD(5A)SUBARACHNOID OR HEAD INJUR?
L10 92093 SEA ABB=ON PLU=ON CEREBR? VASCUL? DISEASE OR STROKE OR
CEREBROVASOSPASM OR BLOOD(5A)SUBARACHNOID OR HEAD INJUR?
L11 125191 SEA ABB=ON PLU=ON CEREBR? VASCUL? DISEASE OR STROKE OR
CEREBROVASOSPASM OR BLOOD(5A)SUBARACHNOID OR HEAD INJUR?
L12 37304 SEA ABB=ON PLU=ON CEREBR? VASCUL? DISEASE OR STROKE OR
CEREBROVASOSPASM OR BLOOD(5A)SUBARACHNOID OR HEAD INJUR?

TOTAL FOR ALL FILES

L13 369838 SEA ABB=ON PLU=ON CEREBR? VASCUL? DISEASE OR STROKE OR

CEREBROVASCOSPASM OR BLOOD(5A) SUBARACHNOID OR HEAD INJUR?

L14 0 SEA ABB=ON PLU=ON L4 AND L9
 L15 1 SEA ABB=ON PLU=ON L5 AND L10
 L16 0 SEA ABB=ON PLU=ON L6 AND L11
 L17 3 SEA ABB=ON PLU=ON L7 AND L12
 TOTAL FOR ALL FILES
 L18 4 SEA ABB=ON PLU=ON L8 AND L13
 L19 3 DUP REM L18 (1 DUPLICATE REMOVED)
 D 1-3 IBIB ABS HITSTR

FILE 'REGISTRY' ENTERED AT 15:55:17 ON 16 AUG 2007

E "N-HYDROXY-N'-(4-BUTYL-2-METHYLPHENYL)-FORMAMIDINE"/CN
 E HET0016/CN 5

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS, WPIDS' ENTERED AT 15:56:21 ON 16 AUG 2007

L20 31 SEA ABB=ON PLU=ON "N-HYDROXY-N'-(4-BUTYL-2-METHYLPHENYL)-FORM
 AMIDINE" OR HYDROXY(L) BUTYL(L) METHYLPHENYL(L) FORMAMIDINE? OR
 HET0016
 L21 45 SEA ABB=ON PLU=ON "N-HYDROXY-N'-(4-BUTYL-2-METHYLPHENYL)-FORM
 AMIDINE" OR HYDROXY(L) BUTYL(L) METHYLPHENYL(L) FORMAMIDINE? OR
 HET0016
 L22 31 SEA ABB=ON PLU=ON "N-HYDROXY-N'-(4-BUTYL-2-METHYLPHENYL)-FORM
 AMIDINE" OR HYDROXY(L) BUTYL(L) METHYLPHENYL(L) FORMAMIDINE? OR
 HET0016
 L23 28 SEA ABB=ON PLU=ON "N-HYDROXY-N'-(4-BUTYL-2-METHYLPHENYL)-FORM
 AMIDINE" OR HYDROXY(L) BUTYL(L) METHYLPHENYL(L) FORMAMIDINE? OR
 HET0016
 L24 9 SEA ABB=ON PLU=ON "N-HYDROXY-N'-(4-BUTYL-2-METHYLPHENYL)-FORM
 AMIDINE" OR HYDROXY(L) BUTYL(L) METHYLPHENYL(L) FORMAMIDINE? OR
 HET0016
 TOTAL FOR ALL FILES
 L25 144 SEA ABB=ON PLU=ON "N-HYDROXY-N'-(4-BUTYL-2-METHYLPHENYL)-FORM
 AMIDINE" OR HYDROXY(L) BUTYL(L) METHYLPHENYL(L) FORMAMIDINE?
 OR HET0016
 L26 3 SEA ABB=ON PLU=ON L20 AND L9
 L27 3 SEA ABB=ON PLU=ON L21 AND L10
 L28 3 SEA ABB=ON PLU=ON L22 AND L11
 L29 3 SEA ABB=ON PLU=ON L23 AND L12
 L30 1 SEA ABB=ON PLU=ON L24 AND L13
 TOTAL FOR ALL FILES
 L31 13 SEA ABB=ON PLU=ON L25 AND L13
 L32 3 SEA ABB=ON PLU=ON L26 NOT L14
 L33 2 SEA ABB=ON PLU=ON L27 NOT L15
 L34 3 SEA ABB=ON PLU=ON L28 NOT L16
 L35 0 SEA ABB=ON PLU=ON L29 NOT L17

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 15:57:46 ON 16 AUG 2007

L36 3 SEA ABB=ON PLU=ON L26 NOT L14
 L37 2 SEA ABB=ON PLU=ON L27 NOT L15
 L38 3 SEA ABB=ON PLU=ON L28 NOT L16
 L39 0 SEA ABB=ON PLU=ON L29 NOT L17
 TOTAL FOR ALL FILES
 L40 8 SEA ABB=ON PLU=ON L31 NOT L18
 L41 4 DUP REM L40 (4 DUPLICATES REMOVED)
 D 1-4 IBIB ABS
 L42 474 SEA ABB=ON PLU=ON ROMAN R?/AU
 L43 752 SEA ABB=ON PLU=ON ROMAN R?/AU
 L44 491 SEA ABB=ON PLU=ON ROMAN R?/AU
 L45 544 SEA ABB=ON PLU=ON ROMAN R?/AU

TOTAL FOR ALL FILES			
L46	2261	SEA ABB=ON	PLU=ON ROMAN R?/AU
L47	334	SEA ABB=ON	PLU=ON HARDER D?/AU
L48	596	SEA ABB=ON	PLU=ON HARDER D?/AU
L49	323	SEA ABB=ON	PLU=ON HARDER D?/AU
L50	262	SEA ABB=ON	PLU=ON HARDER D?/AU
TOTAL FOR ALL FILES			
L51	1515	SEA ABB=ON	PLU=ON HARDER D?/AU
L52	286	SEA ABB=ON	PLU=ON MIYATA N?/AU
L53	354	SEA ABB=ON	PLU=ON MIYATA N?/AU
L54	312	SEA ABB=ON	PLU=ON MIYATA N?/AU
L55	848	SEA ABB=ON	PLU=ON MIYATA N?/AU
TOTAL FOR ALL FILES			
L56	1800	SEA ABB=ON	PLU=ON MIYATA N?/AU
L57	5522	SEA ABB=ON	PLU=ON SATO M?/AU
L58	6740	SEA ABB=ON	PLU=ON SATO M?/AU
L59	4543	SEA ABB=ON	PLU=ON SATO M?/AU
L60	18124	SEA ABB=ON	PLU=ON SATO M?/AU
TOTAL FOR ALL FILES			
L61	34929	SEA ABB=ON	PLU=ON SATO M?/AU
L62	28	SEA ABB=ON	PLU=ON KAMEO K?/AU
L63	55	SEA ABB=ON	PLU=ON KAMEO K?/AU
L64	28	SEA ABB=ON	PLU=ON KAMEO K?/AU
L65	131	SEA ABB=ON	PLU=ON KAMEO K?/AU
TOTAL FOR ALL FILES			
L66	242	SEA ABB=ON	PLU=ON KAMEO K?/AU
L67	390	SEA ABB=ON	PLU=ON OKUYAMA S?/AU
L68	558	SEA ABB=ON	PLU=ON OKUYAMA S?/AU
L69	345	SEA ABB=ON	PLU=ON OKUYAMA S?/AU
L70	649	SEA ABB=ON	PLU=ON OKUYAMA S?/AU
TOTAL FOR ALL FILES			
L71	1942	SEA ABB=ON	PLU=ON OKUYAMA S?/AU
L72	0	SEA ABB=ON	PLU=ON L42 AND L47 AND L52 AND L57 AND L62 AND L67
L73	0	SEA ABB=ON	PLU=ON L43 AND L48 AND L53 AND L58 AND L63 AND L68
L74	0	SEA ABB=ON	PLU=ON L44 AND L49 AND L54 AND L59 AND L64 AND L69
L75	1	SEA ABB=ON	PLU=ON L45 AND L50 AND L55 AND L60 AND L65 AND L70
TOTAL FOR ALL FILES			
L76	1	SEA ABB=ON	PLU=ON L46 AND L51 AND L56 AND L61 AND L66 AND L71
D IBIB ABS			
L77	6950	SEA ABB=ON	PLU=ON (L42 OR L47 OR L52 OR L57 OR L62 OR L67)
L78	8888	SEA ABB=ON	PLU=ON (L43 OR L48 OR L53 OR L58 OR L63 OR L68)
L79	5964	SEA ABB=ON	PLU=ON (L44 OR L49 OR L54 OR L59 OR L64 OR L69)
L80	20447	SEA ABB=ON	PLU=ON (L45 OR L50 OR L55 OR L60 OR L65 OR L70)
TOTAL FOR ALL FILES			
L81	42249	SEA ABB=ON	PLU=ON (L46 OR L51 OR L56 OR L61 OR L66 OR L71)
L82	95	SEA ABB=ON	PLU=ON (L3 OR L20 OR L9) AND L77
L83	108	SEA ABB=ON	PLU=ON (L3 OR L21 OR L10) AND L78
L84	90	SEA ABB=ON	PLU=ON (L3 OR L22 OR L11) AND L79
L85	57	SEA ABB=ON	PLU=ON (L3 OR L23 OR L12) AND L80
TOTAL FOR ALL FILES			
L86	350	SEA ABB=ON	PLU=ON (L3 OR L25 OR L13) AND L81
L87	93	SEA ABB=ON	PLU=ON L82 NOT (L72 OR L36 OR L14)
L88	106	SEA ABB=ON	PLU=ON L83 NOT (L73 OR L37 OR L15)
L89	88	SEA ABB=ON	PLU=ON L84 NOT (L74 OR L38 OR L16)
L90	55	SEA ABB=ON	PLU=ON L85 NOT (L75 OR L39 OR L17)

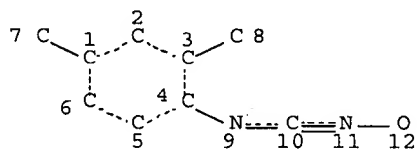
09937946

```

TOTAL FOR ALL FILES
L91      342 SEA ABB=ON  PLU=ON  L86 NOT (L76 OR L40 OR L18)
L92      186 DUP REM L91 (156 DUPLICATES REMOVED)
          D 1 ABS
L93      2 SEA ABB=ON  PLU=ON  (L3 OR L20) AND L9 AND L77
L94      2 SEA ABB=ON  PLU=ON  (L3 OR L21) AND L10 AND L78
L95      2 SEA ABB=ON  PLU=ON  (L3 OR L22) AND L11 AND L79
L96      2 SEA ABB=ON  PLU=ON  (L3 OR L23) AND L12 AND L80
TOTAL FOR ALL FILES
L97      8 SEA ABB=ON  PLU=ON  (L3 OR L25) AND L13 AND L81
L98      0 SEA ABB=ON  PLU=ON  L93 NOT (L72 OR L36 OR L14)
L99      0 SEA ABB=ON  PLU=ON  L94 NOT (L73 OR L37 OR L15)
L100     0 SEA ABB=ON  PLU=ON  L95 NOT (L74 OR L38 OR L16)
L101     0 SEA ABB=ON  PLU=ON  L96 NOT (L75 OR L39 OR L17)
TOTAL FOR ALL FILES
L102     0 SEA ABB=ON  PLU=ON  L97 NOT (L76 OR L40 OR L18)

```

=> d l3 que stat
L1 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
L3 115 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 187 ITERATIONS
SEARCH TIME: 00.00.01

115 ANSWERS

=> log y

STN INTERNATIONAL LOGOFF AT 16:03:45 ON 16 AUG 2007